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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,489	04/28/2005	Torayuki Tsukada	10921.313USWO	4098

52835 7590 03/23/2009

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EXAMINER	
INGHAM, JOHN C	
ART UNIT	PAPER NUMBER
2814	

MAIL DATE	DELIVERY MODE
03/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/533,489	TSUKADA ET AL.	
	Examiner	Art Unit	
	JOHN C. INGHAM	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8-17* is/are allowed.

6)☒ Claim(s) *1-4,6 and 7* is/are rejected.

7)☒ Claim(s) *5 and 34* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 29 January 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/517,943 (now US 7,342,480) has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims **1-4 and 6-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (2002-57009, figure 37 and 38 referenced in instant specification), hereinafter AAPA, and Tsunoda (US 5,339,068).

5. Regarding claims **1-3 and 6**, AAPA discloses in Fig 37 a chip resistor comprising a chip resistor body made of a metal and having a front surface (top), a rear surface (bottom) provided at an interval in a thickness direction, a pair of side surfaces extending in a length direction at an interval in a width direction, and a pair of end surfaces (90C) provided at an interval in the length direction; a plurality of electrodes (91) provided in series on the rear surface of the resistor body at intervals in the length direction; a metal coating layer comprising a solder layer (92) covering a respective one of the electrodes.

6. AAPA does not specify wherein the metal coating layer covers a respective one of the end surfaces, a first insulation layer covers regions between the plurality of electrodes on the front surface and the rear surface of the resistor, a second insulation layer covering the pair of side surfaces of the resistor body, wherein each of the electrodes and the metal coating layer overlap a portion of the first insulation layer, said portion of the first insulation layer being held in direct contact with the rear surface of the resistor body and inserted between the metal coating layer and the rear surface of the resistor body, the metal coating layer extending beyond the respective electrode into direct contact with the first insulation layer.

7. Tsunoda teaches in Figs. 8 and 9 a chip resistor having insulation layers (14) of an identical material covering the front, rear and side surfaces to shield the resistor

body from the metal electrodes (col 2 ln 31-33 and ln 51-53). The metal electrodes (18 and a metal coating layer 19, solder layer) overlap a portion of the first insulation layer, said portion of the first insulation layer (14) being held in direct contact with the rear surface of the resistor body (10) and being inserted between the metal coating layer (19) and the rear surface of the resistor body, the metal coating layer extending beyond the respective electrode into direct contact with the first insulation layer to minimize part-to-part changes in resistance (col 2 ln 26-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Tsunoda on the AAPA in order to minimize part-to-part changes in resistance and shield the resistor body from the metal electrodes.

8. The language "the plurality of electrodes being formed by plating" describes a product-by-process. See MPEP 2113. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

9. Regarding claim **4**, Tsunoda teaches (col 9 ln 1-10) the resistor of claim 2, wherein each of the electrode (18 and 19) has a greater thickness than the first insulation layer (14).

10. Regarding claim **7**, Tsunoda teaches the resistor of claim 1, wherein each of the electrodes is spaced from a respective end surface of the resistor body in the length direction (electrodes 18 are spaced from end surfaces by intervening layers 116, 11).

Allowable Subject Matter

11. Claims 5 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or make obvious the device of claims 5 or 34, wherein the plurality of electrodes comprises two or more pairs of electrodes or wherein each of the plurality of electrodes is held in direct contact with the rear surface of the resistor body.

13. Claims 8-17 are allowed.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or make obvious the method of claims 8, 12 or 13 including the steps of producing a resistor aggregate shaped into a bar, the resistor aggregate made of a metal and having a rear face provided with a multiplicity of electrodes, the multiplicity of electrodes being formed by plating and arranged at intervals in a longitudinal direction of the resistor aggregate, regions between the multiplicity of electrodes on the rear face are covered with a first insulation layer, the resistor aggregate having a pair of side surfaces covered with a second insulation layer;

and dividing the resistor aggregate into a plurality of chip resistors by cutting the resistor aggregate at a plurality of locations in the longitudinal direction of the resistor aggregate.

Response to Arguments

15. Applicant's arguments with respect to claims 1-4 and 6-7 have been considered but are moot in view of the new ground(s) of rejection. Tsunoda teaches in Figs. 8 and 9 a chip resistor having the new limitations.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. INGHAM whose telephone number is (571)272-8793. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Howard Weiss/
Primary Examiner
Art Unit 2814

John C Ingham
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